BEFORE THE PUBLIC UTILITIES COMMISSION
OF THE STATE OF CALIFORNIA

FILED
01/11/19
04:59 PM

Application of Pacific Gas and Electric Company (U39E) for Approval of Demand Response Programs, Pilots and Budgets for Program Years 2018 – 2022.	Application 17-01-012 (Filed January 17, 2017)
And Related Matters.	Application 17-01-018 Application 17-01-019

COMMENTS OF SUNRUN INC. ON THE DEMAND RESPONSE AUCTION MECHANISM PILOT PROGRAM

Tim Lindl
Scott Dunbar
KEYES & FOX LLP
436 14th Street, Suite 1305
Oakland, CA 94612
Telephone: (510) 314-8385
E-mail: tlindl@keyesfox.com
sdunbar@keyesfox.com

Counsel to Sunrun Inc.

January 11, 2019

BEFORE THE PUBLIC UTILITIES COMMISSION
OF THE STATE OF CALIFORNIA

Application of Pacific Gas and Electric Company (U39E) for Approval of Demand Response Programs, Pilots and Budgets for Program Years 2018 – 2022.	Application 17-01-012 (Filed January 17, 2017)
And Related Matters.	Application 17-01-018 Application 17-01-019

COMMENTS OF SUNRUN INC. ON THE DEMAND RESPONSE AUCTION MECHANISM PILOT PROGRAM

Pursuant to Rule 6.2 of the Rules of Practice and Procedure of the California Public Utilities Commission ("Commission"), Sunrun Inc. ("Sunrun") respectfully submits these comments on the Demand Response Auction Mechanism ("DRAM") pilot program.

I. Description of Sunrun

Sunrun is the largest dedicated residential rooftop solar company in the United States. Since establishing the "solar as a service" model in 2007, Sunrun continues to lead the industry in providing clean energy to homeowners with little to no upfront cost. Sunrun designs, installs, finances, insures, monitors and maintains the solar panels on a homeowner's roof, while families receive predictable pricing for 20 years or more. Sunrun's BrightBox energy storage solution combines the company's solar power generation with smart inverter technology and home battery storage to provide California ratepayers with valuable grid services day and night. Sunrun is headquartered in San Francisco, California and has more than 1,700 California employees based at 21 facilities around the state.

II. Introduction to DRAM 2.0 Concept Proposal

DRAM has had mixed success but going forward, a key determinant for success will be **whether the program, and California's grid modernization efforts as a whole, successfully engage behind the meter ("BTM") storage,** as this asset matures and achieves hundreds of megawatts and then gigawatts of scale.

In contrast to California's complex and overlapping approaches to engaging BTM resources, examples of simpler mechanisms are emerging in other regions. Most notable is the rapid expansion of "Bring Your Own Device" ("BYOD") utility programs to include residential storage, which have been proposed or have launched in New York, Vermont, Massachusetts, Rhode Island and New Hampshire. This is an example of a procurement mechanism that creates a uniform, straightforward, and relatively open-ended path for the market to deliver BTM storage as a grid resource. BYOD programs work by establishing preset performance goals and the value for meeting those goals. The programs then enable developers to understand a more full picture of the value proposition from BTM storage and market it to customers in innovative ways, often using private financing to translate long term value into upfront savings for customers. These programs are more effective because they enable developers to help utilities meet their needs by taking on responsibility for deployment and operation of the storage resources.

Ultimately, if programs to engage BTM resources are too complex or difficult to navigate, even the best designed structures will not deliver value for California's grid and

customers. Growing numbers of batteries will experience stranded potential and will be limited in their contribution to the grid and California's energy policy goals.[1]

III. Recommendations

Sunrun respectfully makes the following recommendations for modifying the DRAM program:

10-year Program Term: In today's universe of 10-year battery warranties, a 6-year program term creates untenable uncertainty. In Vermont and New York, battery programs recognize this and ensure 10-year revenue streams for successful performance. Within this 10-year time frame, individual contract periods could be 2-4 years, implemented in succession.

Support Long-term Asset Deployment Through Trailing Price Visibility: To deploy long term, capital-intensive assets, a 10-year program length is essential, but if contract periods are 1-2 years, then contract value/pricing uncertainty may also preclude storage deployment. If a clearing price auction approach is not adopted across DRAM or for auctions within DRAM, this can be addressed in a blind auction by providing visibility, post-auction, on the trailing pricing. This provides participants the visibility to risk-weight future pricing and use this to make decisions to deploy capital-intensive long-term assets. As in any efficient market, any developer who seeks to increase pricing toward the higher pricing that may have been observed in the past risks being out-bid. This will ensure consistent market pressure to drive optimal pricing for ratepayers.

Serve as a "Hub" for all LSE's Seeking to Derive Value from BTM Resources: In its current form, DRAM will address a shrinking portion of California's load as Community Choice

[1] The current exclusion of credit for exported energy from BTM storage in the DR pathway is a primary cause of stranded potential, particularly in the residential segment. Here we focus on specific modifications to the DRAM program structure, scope, and objectives, but continue to see credit for exports as a necessary condition for success of BTM storage.

Aggregators ("CCAs") grow. Meanwhile, CCAs are well positioned to engage with BTM resources due to their focus on customer choice, engagement, and clean energy. Procuring resource adequacy ("RA") from such resources creates a strong foundation for additional engagement around capacity and energy value. However, such procurement contracts must currently be developed on an entirely bilateral basis and CCAs in particular have varying levels of expertise and resources to engage varied resource types. DRAM should become a procurement mechanism for all LSEs including CCAs, and can become a "hub" or clearinghouse for both IOUs and CCAs to derive value from BTM resources in an efficient fashion, especially considering the otherwise daunting complexity of geographic overlay of CAISO Sub-LAPs and CCA territories. In this way, DRAM can be a single entry point for developers and LSEs to engage around reliability resources, onto which customer programs and additional, value-added services and customer engagement can be built.

Facilitate Value Stacking - Integrate with DRP/IDER Value Streams: In New York and New England, BYOD programs are a single "front door" to which developers can bring resources, which can be utilized for multiple values, including generation capacity, transmission capacity, local congestion mitigation value, and distribution deferral. The mechanics of stacking value could be done by the buyer or the seller, but routing other services through DRAM-enrolled resources would facilitate access to BTM resources for additional value streams. *DRAM can be a single entry-point from which any LSE, but IOUs in particular can procure resources for targeted local capacity requirements ("LCR") or distribution deferral resources.* This approach to value stacking would unify California's disparate efforts and unify customer engagement through a single mechanism. Without a unifying mechanism, success in multiple different grid programs to engage BTM resources will ironically lead to a maze of confusion as

vendors and customers try to navigate overlapping structures. *As a broad-based program, DRAM could serve as a unifying mechanism for BTM engagement.* Alternatively, DRAM could integrate with the Distribution Tariff concept currently being explored in the IDER proceeding.

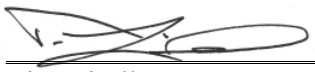
IV. Conclusion

DRAM can become a shining success for spurring battery deployment and innovation and creating meaningful grid value by:

- Providing long-term revenue, with visibility into pricing trends.
- Providing a pathway to deliver grid value and reliability for preferred resources, offsetting non-preferred resources.
- Serving as a hub for procuring BTM resources, including storage for the proliferating LSE landscape.
- Providing as simple a platform as possible on which additional local value streams can be layered.

Sunrun appreciates the opportunity to provide these comments and recommendations and looks forward to continued engagement in this proceeding.

Respectfully submitted,



Tim Lindl
Scott Dunbar
KEYES & FOX LLP
436 14th Street, Suite 1305
Oakland, CA 94612
Telephone: (510) 314-8385
E-mail: tlindl@keyesfox.com
sdunbar@keyesfox.com

Counsel to Sunrun Inc.

Date: January 11, 2019